Amendment under 37 C.F.R. § 1.116 U.S. Application No.: 10/028,913

REMARKS

Claims 4-8 and 11-17 are all the claims pending in the application. By this Amendment, Applicant cancels claims 1-3, 9, and 10 as being directed to non-elected groups. In addition, Applicant amends claim 4 to further clarify the invention. Finally, Applicant adds claims 11-17.

Preliminary Matter

As a preliminary matter, Applicant thanks the Examiner for acknowledging all claims to foreign priority under 35 U.S.C. §119(e).

The Examiner, however, failed to acknowledge the receipt of a certified copy of the priority document filed on December 28, 2001. Applicant respectfully requests the Examiner to check the appropriate boxes on the Form PTO-326 indicating that the certified copy of the priority document has been received.

Prior Art Rejections

The Examiner maintained the rejection of claims 4-8 under 35 U.S.C. § 102(b) as being allegedly anticipated by U.S. Patent No. 5,918,012 to Astiz et al. (hereinafter "Astiz").

Applicant respectfully traverses this rejection and respectfully requests the Examiner to reconsider the rejection in view of the following comments.

Of the rejected claims, only claim 4 is independent. Claim 4 recites a unique combination of features, including "an image detector for detecting a static image at a corresponding time based on point time information transmitted from said user terminal," and

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"an image recognizer for recognizing a specific portion of an image designated by said user based on point coordinate information transmitted from said user terminal and based on said static image detected by said image detector."

The Examiner alleges that Astiz teachings of a map file and using (x, y, t) coordinates provided by the user to determine if a hyperlink exists in a moving image are equivalent to an image detector and an image recognizer as set forth in claim 4 (see page 6 of the Office Action). Applicant respectfully disagrees.

For example, an illustrative, non-limiting embodiment of the present invention discloses the following system for finding links within moving images. When the user selects a point in the moving image, the user terminal recognizes the point coordinate information (x, y) and the point time information (t) of the user selection. The server recreates the static image that appeared on the user display during said selection based on the point time information received from the user terminal. After recreating the static image, the server uses the point coordinate information received from the user terminal to detect a specific portion of the static image (a particular shape) where the user selection was made. At the same time, using the point coordinate information, the server pulls up or calculates the linking information using the link point information storage.

In particular, when a certain shape within the image, i.e. a specific portion of the image, moves abruptly at a point of time selected by the user, the storage will have the linking information stored therein. On the other hand, when the movement is linear, not abrupt, the

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server will calculate the linking information for this specific portion using the linking information stored therein (e.g., the linking information will include a starting point of the movement and the ending point of the movement and based on this, the linking information for a particular time will be interpolated). Finally, the server checks whether the selected shape (particular portion of the image selected by the user) has linking information as determined by the link point detector. When the linking information is found, the related information is displayed on the user terminal.

As a result, the volume of information that needs to be stored is reduced. It becomes unnecessary to store link information on all point times and link information on all point coordinates. This illustrative, non-limiting embodiment is provided by way of an example only and is not intended to limit the scope of the claims in any way.

Astiz teaches that in a moving video, transmitting just x and y coordinates of the click are insufficient, thereby the (x, y, t) coordinates are transmitted. In particular, the t coordinate is most easily obtained by recording the frame number. However, (x, y, t) data is sent by the viewer to the browser together (col. 7, lines 37 to 38) and then, is transmitted to the server, again together (col. 8, lines 6 to 13). Astiz's (x, y, t) data is transmitted together because this coordinate data (x, y, t) is used together to look up an URL address associated with user selection in a mapping file 35. In other words, Astiz teaches finding the associated URL address by looking up the (x, y, t) coordinates in a map script.

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Astiz teaches accessing a script file, as shown in col. 8, lines 45 to 59. This file stores a table, where a corresponding URL address is found using user designated (x, y, t) data. The coordinate t is a frame number and x and y are points on the screen. This data is transmitted from the user browser to the server. Astiz, however, has nothing to do with image detection.

Astiz teaches a look up table for checking to see if the point selected by a user is a hyperlink.

Astiz fails to teach or suggest finding an associated URL address from a static image detected in the server. In fact, in Astiz, no static images are detected. Moreover, Astiz only uses numbers to determine the corresponding URL address. The reference fails to teach or suggest detecting a static image from a point time information (e.g. using this frame number to retrieve the corresponding image frame), and thereby, using the retrieved static image with point coordinate information to determine a specific portion of an image.

The Examiner alleges that in Astiz (x, y, t) points are used to recognize an image, in particular, the hot spot images such as comet and moon images (see page 6 of the Office Action). Applicant respectfully points out that in Astiz, the hot spots represent the presence of a hyperlink (col. 8, lines 35) and not an object as alleged by the Examiner. In other words, the spots are link points and not a specified portion of the image designated by the user. In short, in Astiz, the spots are designated by X-Y coordinates or can be a series of pre-numbered rectangles designating a presence of a hyperlink.

In other words, even assuming *arguendo* that comparing the frame number to the frame numbers stored in the map file can somehow be compared to detecting a static image, Astiz still fails to teach or suggest recognizing a specific portion of an image (e.g., a shape) designated by

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the user. In Astiz, the map file simply stores the coordinate locations of the hyperlinks and the (x, y) coordinates received from the user are compared with coordinate values stored in the map file to determine if a hyperlink is present for the point clicked by the user. Astiz, however, fails to teach or suggest any kind of image recognition, where a specific portion of an image designated by the user is selected or extracted using the static image detected by the server.

In short, Astiz only teaches detecting whether the coordinate values received from the user contain hyperlinks by checking these coordinate values in a mapping file. Astiz fails to teach or suggest any kind of image recognition such as detecting a static image based on point time information and then recognizing a specific portion of an image designated by the user based on the detected static image and point coordinate data received from the user terminal.

For at least these exemplary reasons, Applicant respectfully submits that independent claim 4 is patentably distinguishable from Astiz. Applicant therefore respectfully requests the Examiner to reconsider and withdraw this rejection of independent claim 4 and its dependent claims 5-8.

New Claims

In order to provide more varied protection, Applicant adds claims 11-17. Claims 11-17 are patentable at least by virtue of their dependency on claim 4.

In addition, dependent claim 11 is patentable at least by virtue of its recitation of "wherein said point time information is transmitted separately from said user coordinate information." In Astiz, (x, y, t) coordinates is a set of data, which is transmitted together and is used for the same purpose. Astiz fails to teach or suggest transmitting t value separately from x

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and y coordinates. In fact, a separate transmission would make little sense for Astiz's system

because all three values (x, y, t) are to be used together for a look up operation in a map file.

Moreover, dependent claim 17 recites "the specified portion of the image is a moving

object in the image." Astiz only teaches that a "hot spot" is a hyperlink point. Astiz fails to

teach or suggest recognizing the moving object in the image.

Conclusion

In view of the above, reconsideration and allowance of this application are now believed

to be in order, and such actions are hereby solicited. If any points remain in issue which the

Examiner feels may be best resolved through a personal or telephone interview, the Examiner is

kindly invited to contact the undersigned attorney at the telephone number listed below.

The USPTO is directed and authorized to charge all required fees, except for the Issue

Fee and the Publication Fee, to Deposit Account No. 19-4880. Please also credit any

overpayments to said Deposit Account.

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CUSTOMER NUMBER

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